

ABSTRACT

There is disclosed a photoelectric conversion device comprising a substrate 1 serving as a lower electrode; first conductivity-type crystalline semiconductor particles 3 deposited on the substrate; second conductivity-type semiconductor layers 4 formed on the crystalline semiconductor particles 3; an insulator layer 2 formed among the crystalline semiconductor particles; and an upper electrode layer 5 formed on the second conductivity-type semiconductor layers 4, wherein the second conductivity-type semiconductor layers 4 each have a smaller thickness at or below an equator of each of the crystalline semiconductor particles than at a zenith region thereof, and the second conductivity-type semiconductor layers 4 include an impurity element with a concentration gradient decreasing with proximity to the crystalline semiconductor particles.